

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number  
**WO 2004/100045 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 19/00**,  
G06T 15/00, B23H 1/04

[KR/US]; 6205 S. Ridge Road, Plainfield, IL 60544 (US).  
**YOURIST**, Sheldon [US/US]; 350 Wire Road, York, PA  
17402 (US).

(21) International Application Number:  
PCT/US2004/013593

(74) Agents: **HADDAWAY**, Keith, G., Ph.D. et al.; Venable  
LLP, P.O. Box 34385, Washington, DC 20043-9998 (US).

(22) International Filing Date: 3 May 2004 (03.05.2004)

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/428,035 2 May 2003 (02.05.2003) US

(71) Applicant (for all designated States except US): **GRA-  
HAM PACKAGING COMPANY, L.P.** [US/US]; 2401  
Pleasant Valley Road, York, PA 17402 (US).

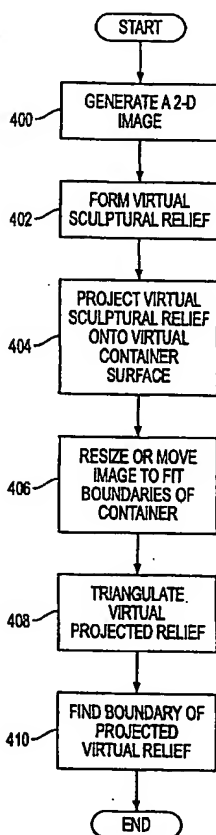
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HONG**, Seungyeol

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR CREATING TEXTURED HANDLE PACKAGING



(57) Abstract: A system, method, and computer program product for generating an image for producing a design for a container. The method comprising the steps of generating a virtual sculptural relief design (400, 402); projecting the virtual sculptural relief onto a virtual container surface (404), said virtual container surface corresponding to a non-open region of said container; manipulating said relief in three-dimensional space to provide a virtual projected sculptural relief on said non-open region of said virtual container surface (406); and removing distortions in the virtual projected sculptural relief by modifying a boundary of the projected relief (410), flattening the boundary-modified relief onto a plane in 3D space, generating a new virtual sculptural relief and reprojecting the new virtual sculptural relief onto the virtual container surface to obtain the design for the container.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— of inventorship (Rule 4.17(iv)) for US only

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*